



Water-Data Report 2008

01017550 WILLIAMS BROOK AT PHAIR, ME

St. John Basin
Meduxnekeag Subbasin

LOCATION.--Lat 46°37'41", long 67°57'11" referenced to North American Datum of 1983, Aroostook County, ME, Hydrologic Unit 01010005, on right bank at upstream side of Bangor and Aroostook Railroad bridge, 0.1 mi upstream from Phair, and 2.5 mi upstream from Prestile Stream.

DRAINAGE AREA.--3.82 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--

DISCHARGE: November 1999 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete weir. Elevation of gage is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except for periods of ice effect, Dec. 17-18, Jan. 4-5, and Jan. 12 to Apr. 3, which are fair, and period of doubtful stage-discharge relation, Sept. 5-8, which is poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 187 ft³/s, Apr. 23, 2007, gage height, 5.31 ft; minimum discharge, 0.19 ft³/s, Aug. 16 and 25, 2001.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 16	1615	95	3.68
Apr 21	2215	125	4.16
Apr 23	2245	130	4.26
Apr 30	0530	*163	*4.80

Minimum discharge, 0.34 ft³/s, Oct. 8, gage height, 1.40 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.74	1.7	6.4	4.0	e4.2	e3.5	e2.4	34	7.5	7.1	9.9	1.8
2	0.63	1.7	6.1	4.0	e4.2	e3.5	e2.8	25	4.8	4.0	19	1.7
3	0.63	2.3	6.3	3.8	e4.2	e3.3	e3.3	21	3.9	3.2	18	1.7
4	0.66	25	6.7	e3.8	e4.0	e3.3	4.1	20	3.3	3.5	18	1.7
5	0.60	10	5.8	e3.7	e4.0	e3.3	5.6	22	2.9	2.7	7.9	e1.6
6	0.51	7.4	5.3	3.6	e4.0	e3.3	6.7	18	2.6	2.4	5.6	e1.6
7	0.58	11	5.0	3.4	e3.8	e3.1	7.1	16	2.6	2.2	4.9	e3.1
8	0.42	7.4	4.8	5.4	e3.8	e3.2	8.0	20	2.7	2.1	4.8	e2.2
9	0.54	6.1	4.4	11	e3.5	e3.2	9.7	20	2.6	3.3	13	3.7
10	0.55	5.6	4.2	14	e3.4	e3.2	13	13	4.0	6.3	8.2	5.8
11	0.48	5.1	4.0	10	e3.4	e3.2	15	11	17	3.1	5.7	2.8
12	3.0	4.5	4.3	e9.8	e3.2	e2.9	16	10	12	2.3	5.6	2.1
13	5.3	4.6	3.8	e8.9	e3.2	e2.8	18	8.6	4.9	2.2	6.2	2.1
14	2.2	5.0	3.7	e8.2	e3.2	e2.8	20	7.6	3.2	2.5	4.9	2.0
15	1.6	16	3.5	e7.7	e3.2	e2.7	21	6.9	2.8	2.2	4.1	2.0
16	1.3	74	3.4	e7.2	e3.2	e2.6	26	6.7	4.1	2.2	4.6	1.8
17	1.1	37	e3.5	e6.9	e4.0	e2.5	40	6.3	5.3	2.1	3.8	1.7
18	0.92	19	e3.4	e6.9	e5.8	e2.5	59	5.6	6.1	2.0	3.2	1.5
19	0.88	14	3.4	e6.7	e11	e2.5	70	6.7	4.1	3.1	4.1	1.4
20	1.4	12	3.4	e6.4	e8.1	e2.5	76	17	3.1	3.5	3.3	1.4
21	1.4	11	3.2	e6.0	e5.2	e2.5	103	8.3	3.2	3.8	2.7	1.4
22	1.0	13	3.1	e5.7	e5.2	e2.5	99	7.0	3.1	9.2	2.4	1.3
23	1.2	18	3.3	e5.5	e5.2	e2.4	95	7.3	2.5	6.1	2.3	1.3
24	3.3	11	9.3	e5.2	e4.7	e2.3	81	6.6	3.4	6.5	2.3	1.3
25	1.9	9.2	8.4	e5.0	e4.2	e2.3	55	5.1	2.7	7.6	2.8	1.2
26	1.4	8.8	5.3	e4.7	e3.8	e2.3	49	4.5	2.2	6.8	2.6	1.3
27	3.4	10	4.7	e4.5	e3.8	e2.3	38	4.4	2.5	6.4	2.2	4.0
28	7.0	9.0	4.4	e4.4	e3.6	e2.2	30	3.8	2.4	8.6	2.1	12
29	2.9	7.5	4.3	e4.5	e3.5	e2.2	44	3.4	17	11	2.0	11
30	2.1	7.2	4.1	e4.6	---	e2.2	91	3.0	15	11	2.1	4.7
31	1.9	---	4.0	e4.6	---	e2.2	---	4.2	---	8.3	2.0	---
Total	51.54	374.1	145.5	190.1	126.6	85.3	1,108.7	353.0	153.5	147.3	180.3	83.2
Mean	1.66	12.5	4.69	6.13	4.37	2.75	37.0	11.4	5.12	4.75	5.82	2.77
Max	7.0	74	9.3	14	11	3.5	103	34	17	11	19	12
Min	0.42	1.7	3.1	3.4	3.2	2.2	2.4	3.0	2.2	2.0	2.0	1.2
Cfsm	0.44	3.26	1.23	1.61	1.14	0.72	9.67	2.98	1.34	1.24	1.52	0.73
In.	0.50	3.64	1.42	1.85	1.23	0.83	10.80	3.44	1.49	1.43	1.76	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.27	8.20	6.42	4.23	2.17	5.93	23.9	8.99	4.10	3.15	2.12	1.69
Max	16.5	18.0	11.9	12.5	6.10	16.2	37.0	12.4	6.58	5.98	5.82	3.85
(WY)	(2006)	(2006)	(2004)	(2006)	(2006)	(2000)	(2008)	(2000)	(2006)	(2006)	(2008)	(2005)
Min	1.08	0.96	1.26	0.41	0.39	0.75	11.3	5.74	2.60	1.46	0.40	0.63
(WY)	(2001)	(2002)	(2002)	(2002)	(2002)	(2001)	(2006)	(2001)	(2002)	(2001)	(2001)	(2000)

SUMMARY STATISTICS

	Calendar Year 2007	Water Year 2008	Water Years 2000 - 2008	
Annual total	2,228.10	2,999.14		
Annual mean	6.10	8.19	6.13	
Highest annual mean			9.34	2006
Lowest annual mean			3.53	2001
Highest daily mean	110	Apr 23	117	Apr 23, 2001
Lowest daily mean	0.42	Oct 8	0.24	Aug 25, 2001
Annual seven-day minimum	0.53	Oct 5	0.27	Sep 14, 2001
Maximum peak flow		163	187	Apr 23, 2007
Maximum peak stage		4.80	5.31	Apr 23, 2007
Instantaneous low flow		0.34	0.19	Aug 16, 2001
Annual runoff (cfsm)	1.60	2.15	1.60	
Annual runoff (inches)	21.70	29.21	21.80	
10 percent exceeds	12	17	13	
50 percent exceeds	2.8	4.0	2.7	
90 percent exceeds	0.77	1.7	0.80	

